

Ranger® 10,000 Plus & Ranger® 10,000

At Your Service - Everyday!

The Ranger® 10,000 Plus or Ranger® 10,000 is the right choice for a general contractor, maintenance crew, farmer or rancher who needs a reliable and rugged general purpose AC/DC welder and an AC power generator. Welding capability includes stick, basic TIG, MIG and flux-cored welding.

Now with 10,500 watts **NEW!** of peak AC generator power from the Ranger® 10,000 Plus (10,000 watts from the Ranger® 10,000). Use peak power for starting and running motors. The 9,000 watts of continuous power also makes this a versatile product for a Lincoln plasma cutter, Lincoln inverter, lights, tools, or emergency power.

Processes

Stick, TIG, MIG, Flux-Cored, Gouging



(Ranger 10,000 Plus shown)

Output



Input



KOHLER **SUBARU** POWER AND LABOR **POWERED BY HONDA**

Advantage Lincoln

- AC/DC Welding**
 - Smooth AC/DC welding output for a broad range of stick electrodes, such as Lincoln Excalibur® 7018 (AWS E7018) and Fleetweld® 5P+ (AWS E6010).
 - Capable of MIG, Flux-Cored, and TIG welding (with additional optional equipment).
- 10,500 **NEW!** /10,000 Watts Peak Single-Phase AC Generator Power**
 - 10,500 Watts is the most peak power in its class—Ranger® 10,000 Plus.
 - 10,000 Watts—Ranger® 10,000.
 - Use peak power for motor starting.
 - 9,000 watts continuous power for high capacity needs such as a back-up generator, powering a Pro-Cut® plasma cutter or an Invertec® inverter welder. Also for lights, a grinder or other power tools.
- Rugged Reliability**
 - Rangers® have been subjected to an extensive testing program to ensure reliable operation in a wide variety of environmental conditions.
 - All rated outputs at 100% duty cycle 104° F (40° C).
- 22/23 HP Gasoline Engine Choices **NEW!****
 - Plenty of engine horsepower!
 - Increase from 20.5 HP to 22 HP for Subaru Robin®
 - Increase from 20 HP to 23 HP for Kohler®
 - Also available with 20 HP Honda®
 - All engines are 2-cylinder, 4-cycle OHV (overhead valve) air-cooled.
- Three-Year Lincoln Warranty**
 - Three-year Lincoln warranty (parts and labor) on welder. (Engine is warranted separately by the manufacturer.)

TECHNICAL SPECIFICATIONS

Product Name	Rated Output Current/Voltage/Duty Cycle	Output Range	Engine Model	No. of Cyl.	HP @ Speed (rpm)	Dimensions H x W x D inches (mm)	Net Weight lbs (kg)
Ranger® 10,000 Plus	225A AC CC/25V/100% 210A DC CC/25V/100%	50-225A AC 50-210A DC	Kohler® OHV Command® CH23S	2	23 @ 3600	30.3 x 19.1 x 42.3 (770 x 485 x 1074)	502 (228)
Ranger 10,000 Plus	200A DC CV/20V/100%	15-25V CV 10,500/ 10,000 watts peak	Subaru Robin® OHV EH65 Gasoline		22 @ 3600		528 (240)
Ranger 10,000		9,000 watts continuous	Honda® OHV GX620K1		20 @ 3600		505 (229)

PERFORMANCE

Arc Performance

- Smooth AC/DC welding output for a broad range of stick electrodes, such as Lincoln Excalibur® 7018 (AWS E7018) and Fleetweld® 5P+ (AWS E6010). Also capable of MIG, Flux-Cored, and TIG welding.
- Choose DC(+) for a deep penetrating arc or DC(-) for less penetration on thin sheet metal. Select AC for general purpose welding and non-code aluminum TIG welding.
- Rated 225 amps/25 volts for AC, 210 amps/25 volts for DC and 200 amps/20 volts for CV. All rated outputs at 100% duty cycle 104°F (40°C).
- Simple Output Range Selector can be used to select one of three amperage ranges with generous overlap for Stick/TIG welding, or one Wire Feed welding range.
- Fine adjustment control allows you to dial in just the right welding output for each application.
- Add productivity with self-shielded flux-cored CV wire welding. Compatible with Lincoln LN-15 Across-the-Arc and LN™-25 wire feeders for use with a variety of wire electrodes.
- Expand to AC TIG welding with optional TIG Module and related equipment for non-code aluminum and other alloy welding.
- Arc Gouge with up to 5/32" (4.0 mm) carbon electrode.
- Easy to Maintain – Engines require an oil change only every 100 hours and every 200 hours for the oil filter.

AC Generator Performance

- 10,500 watts peak AC generator power on the Ranger® 10,000 Plus. Most peak power in its class. (10,000 watts on Ranger® 10,000) Use for motor starting.
- 9,000 watts continuous AC generator power. For high capacity needs such as a back-up generator, powering a Pro-Cut® plasma cutter or an Invertec® inverter welder. Also for lights, a grinder or other power tools.
- Delivers up to 38 amps from the single 120V/240V full-KVA receptacle. Standard circuit breakers protect the machine as well as your power tools.
- Delivers up to 40 amps from two 120V duplex receptacles.
- Get two tools in one when you use the Ranger 10,000 as a power generator for emergency standby power, and/or for welding.
- Optional GFCI (Ground Fault Circuit Interrupter) Kit available for additional protection from electrical shock.
- Simultaneous welding and AC generator power – power up to 3,950 watts while welding at 145 amps (AC auxiliary power is reduced when welding simultaneously per table below).
- Take on more jobs - plug in an optional Pro-Cut® 55 plasma cutter to cleanly cut metal.

SIMULTANEOUS WELDING AND POWER LOADS

Welding Output (Amps)	Permissible Power (Watts)
0	9,000
90	6,000
145	3,950
225 AC/210 DC	0

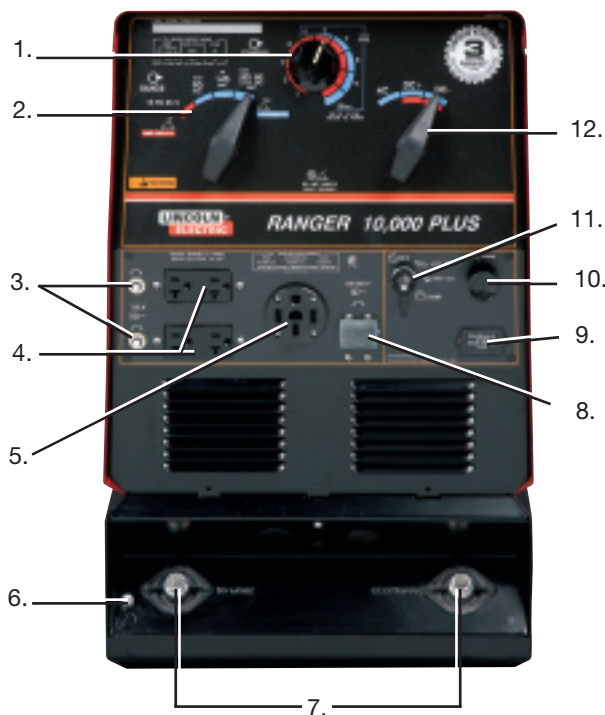
FEATURES

- Choice of three top-of-the-line OHV engines:
 - Kohler® Command® 23 HP CH23S
 - Subaru Robin® 22 HP EH65
 - Honda® 20 HP GX620K1
- Noise at rated load:
 - Kohler®: 105.7 dB sound power (Lwa)
81.6 dBA sound level at 23 ft. (7 m)
 - Subaru Robin®: 106.9 dB sound power (Lwa)
82.7 dBA sound level at 23 ft. (7 m)
 - Honda®: 106.6 dB sound power (Lwa)
82.4 dBA sound level at 23 ft. (7 m)
- Sizable 9 gallon (34 Ltrs) fuel tank capacity with new fuel gauge configuration provides extended hours of operation and easy fuel monitoring.
- Easy to Maintain – Engines require an oil change only every 100 hours and every 200 hours for the oil filter.
- Electric Start Switch makes it easy to get started every morning. Switch combines OFF, START, and IDLER functions into one simple, compact, easy to use switch.

- Circuit breaker protects battery ignition circuit.
- Built-in feet for easy mounting to truck or trailer.
- Tapered fuel filler neck prevents fuel burping when refueling.
- Oil drain valve (no tools required).
- 435 cold cranking amps with the Group 58 battery for extra starting capacity in cold temperatures.



Key Controls



1. Fine Output Control
2. 4 Position Output Range Selector
3. 20 Amp/120 VAC Circuit Breakers
4. 120 Volt AC Receptacles (NEMA 5-20R)
5. 120/240 Volt AC Full KVA Receptacle (NEMA 14-50R)
6. Ground Stud
7. Weld Output Terminals
8. 40 Amp/240 VAC Circuit Breaker
9. Engine Hour Meter
10. Engine Choke Control (Stainless Steel Cable)
11. Engine Start Switch with Idler Control
12. Polarity Switch

QUALITY AND RELIABILITY

- Standard engine hour meter makes it easy to schedule regular maintenance.
- Automatic engine shutdown protection for low oil pressure, preventing major engine damage.
- Automatic engine idler for greater fuel economy, longer engine life and added noise control.
- Quiet muffler with reversible exhaust feature mounts on either right or left side of machine for flexible placement options on a trailer or truck bed. The muffler is made from aluminized steel for added service life.
- Red and black powder paint finish offers increased durability with added protection from rust and corrosion. Also ultraviolet resistant to better retain color and gloss.
- Sturdy steel roof and case sides for added toughness.
- Dependability and long life aided by all-copper windings in rotor and stator with high quality insulation.
- Canadian Standards Association (CSA) approved.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Three year Lincoln warranty (parts and labor) on welder. (Engine is warranted separately by the manufacturer).
- Backed by Lincoln's Service Parts Commitment – We will ship in-stock parts within 24 hours of receipt of the order to anywhere within the U.S.

A CLOSER LOOK

MACHINE SPECIFICATIONS

Product Name	Ordering Information	Description	CC Rated Output Current/Voltage/Duty Cycle	CV-Rated Output Current/Voltage/Duty Cycle	Generator AC Power (2)(3)	Dimension H(5) x W x L inches (mm)	Weight lbs. (kg)
Ranger® 10,000 Plus (Kohler OHV)	K1419-5	<u>Ranger 10,000 Plus</u> 225 Amp AC/210 Amp DC Arc Welder	AC Constant Current 225A/25V/100%	DC Constant Voltage (1) 200A/20V/100% 15-25V	10,500/10,000 Watts Peak 9,000 Watts Cont. 60 Hz Single Phase	30.3 x 19.1 x 42.3 (770 x 485 x 1074)	502 (228)
Ranger® 10,000 Plus (Subaru Robin OHV)	K2468-2	10,500 Watts Peak 9,000 Watts Continuous AC Power	DC Constant Current 210A/25V/100%		Two 120V Duplex Receptacles 20A per Duplex 40A Total(4)		528 (240)
Ranger® 10,000 (Honda OHV)	K2160-4	<u>Ranger 10,000</u> 225 Amp AC/210 Amp DC Arc Welder 10,000 Watts Peak 9,000 Watts Continuous AC Power	Current Ranges 120-225A (AC) 120-210A (DC) 70-145A (AC/DC) 50-90A (AC/DC) Max OCV @ 3700 RPM 80V RMS		120V/240V Receptacle 38A Each 120V Branch(4) 38A @ 240V		505 (229)

- (1) DC constant voltage capability provides convenience and added safety when welding in electrically hazardous conditions.
 (2) When welding, available auxiliary power will be reduced. Output voltage is within +/- 10% at all loads up to rated capacity.
 (3) 120V will operate either 60 Hz or 50/60 Hz power tools, lights, etc.
 (4) Circuits cannot be wired in parallel to operate the same device.
 (5) Height is to top of lift bail. Enclosure height is 26.6" (676 mm).

ENGINE SPECIFICATIONS

Engine Model	Description	Horsepower & Displacement	Ignition	Capacities	Operating Speeds	Fuel Consumption
Kohler® OHV (6) Command CH23S (Gasoline)	2 Cylinder, 4 Cycle, OHV Air-Cooled Gasoline Engine Aluminum Alloy with Cast Iron Liners	23 HP @ 3600 RPM 41.0 cu in (674 cc)	Electric Start 12V Battery 435 Cold Cranking Amps Manual Choke	FUEL: 9 Gals (34 Ltrs.) OIL: 2.0 Qts (1.9 Ltrs)	Full Load 210A DC 3,500 RPM High Idle 3,700 RPM Low Idle 2,200 RPM	1.3 Gals/Hr 4.9 Ltr/Hr. 0.7 Gals/Hr 2.8 Ltr/Hr 0.4 Gals/Hr 1.5 Ltr/Hr
Subaru Robin® OHV EH65 Gasoline (7)	2 Cylinder, 4 Cycle, OHV Air-Cooled Gasoline Engine Aluminum Alloy with Cast Iron Liners	22 HP @ 3600 RPM 39.9 cu in (653 cc)		FUEL: 9 Gals (34 Ltrs.) OIL: 1.6 Qts (1.6 Ltrs)	Full Load 210A DC 3,500 RPM High Idle 3,700 RPM Low Idle 2,200 RPM	1.6 Gals/Hr 6.1 Ltr/Hr. 0.8 Gals/Hr 3.0 Ltr/Hr 0.6 Gals/Hr 2.3 Ltr/Hr
Honda® OHV (8) GX620K1 (Gasoline)	2 Cylinder, 4 Cycle, OHV Air-Cooled Gasoline Engine Aluminum Alloy with Cast Iron Liners	20 HP @ 3600 RPM 37.7 cu in (615 cc)		FUEL: 9 Gals (34 Ltrs.) OIL: 1.9 Qts (1.8 Ltrs)	Full Load 210A DC 3,500 RPM High Idle 3,700 RPM Low Idle 2,200 RPM	1.5 Gals/Hr 5.9 Ltr/Hr 0.7 Gals/Hr 2.8 Ltr/Hr 0.3 Gals/Hr 1.3 Ltr/Hr

- (6) Kohler® warranty is 3 years.
 (7) Subaru Robin® warranty is 3 years.
 (8) Honda® warranty is 2 years.



GENERAL OPTIONS

Power Plug Kit (20 amp)

Provides four 120V plugs rated at 20 amps each, and one dual voltage, full KVA plug rated at 120/240V, 50 amps. 120V plug may not be compatible with common household receptacles.
Order K802-N



Power Plug Kit (15 amp)

Provides four 120V plugs rated at 15 amps each, and one dual voltage, full KVA plug rated at 120/240V, 50 amps. 120V plug is compatible with common household receptacles.
Order K802-R



Full-KVA Power Plug

One dual voltage plug rated at 120/240V, 50 amps. (NEMA 14-50P)
Order T12153-9



GFCI Receptacle Kit

Includes one UL approved 120V ground fault circuit interrupter duplex type receptacle and installation instructions. Replaces the factory-installed 120V duplex receptacle. Each receptacle of the GFCI duplex is rated at 20 amps. Maximum total current from the GFCI duplex is limited to 20 amps. Two kits required for all 120V receptacles on Ranger and Commander products.
Order K1690-1



Spark Arrester Kit

Attaches to muffler exhaust tube. Virtually eliminates spark emissions.
Order K894-1



Canvas Cover

To protect the Ranger 10,000 when not in use. Made from attractive red canvas material that is flame retardant, mildew resistant and water repellent.
Order K886-1



Hand Moving Undercarriage

For moving by hand. Overall width 27 in. (0.7 m). Includes heavy-duty puncture-resistant (inner tube and sealant) tires.
Order K889-2



GENERAL OPTIONS CONT.

Hand Moving Undercarriage

Includes no-flat puncture proof (foam-filled) tires. For moving by hand. Overall width 27 in (0.7 m).
Order K889-3



All-Terrain Undercarriage

For moving by hand at construction sites. Maneuvers over obstacles. Heavy-duty puncture-resistant (inner tube and sealant) tires.
Order K1737-1



Factory Undercarriage

For moving by hand on smooth surface floors. Heavy-duty, puncture-resistant (inner tube and sealant) tires and front caster. Convenient steering handle.
Order K1770-1



Welding Gas Cylinder/ LPG Tank Holder

Holds welding gas cylinder or LPG tank (for products with LPG engine). For LPG: Use first holder for LPG tank and second holder for welding gas cylinder. Both holders will attach to the K1770-1 undercarriage.
Order K1745-1



Roll Cage

Improves damage protection and includes built-in cable rack. Attaches to K1737-1 or K1770-1 undercarriage. Can mount to K2635-1 trailer.
Order K1788-1



Small Two Wheel Welder Trailer

For heavy-duty road, off-road, plant and yard use. Includes pivoting jack stand, safety chains, and 13" wheels. Stiff .120" welded rectangular steel tube frame construction is phosphate etched and powder coat painted for superior rust and corrosion resistance. Low sway suspension gives outstanding stability with manageable tongue weight. Wheel bearings are packed with high viscosity, high pressure, low washout Lubriplate® grease. Includes a Duo-Hitch™, a 2" ball/lunette eye combination hitch. Overall width 60".

Order:

K2635-1 Trailer

K2639-1 Fender & Light Kit

K2640-1 Cable Rack

STICK OPTIONS



Accessory Kit
For stick welding. Includes 35 ft. (10.7 m) #2/0 electrode cable with lug, 30 ft. (9.1 m) #2/0 work cable with lugs, headshield, filter plate, work clamp and electrode holder. 400 amp capacity.
Order K704



Accessory Kit
For stick welding. Includes 20 ft. (6.1 m) #6 electrode cable with lug, 15 ft. (4.6 m) #6 work cable with lugs, headshield, filter plate, work clamp, electrode holder and sample pack of mild steel electrode. 150 amp capacity.
Order K875

TIG OPTIONS



Pro-Torch® PTA-26V TIG Torch
Air-cooled 200 amp torch (2 piece) equipped with valve for gas flow control. 25 ft. (7.6 m) length.
Order K1783-9



Magnum® Parts Kit
Provides all the torch accessories you need to start welding. Parts kit provides collets, collet bodies, a back cap, alumina nozzles and tungstens in a variety of sizes, all packaged in an easy to carry reclosable pack.
Order KP509 for PTA-26V



TIG Module
Portable, high frequency unit with gas valve for TIG welding. Rated at 300 amps/60% duty cycle.
Order K930-2



Control Cable
Connects TIG Module 9-pin to 120V plug. 5 ft. (1.5 m) length.
Order K936-4



Control Cable Extension
Allows the TIG Module to be operated at distances up to 200 ft. from the power source. Available in 45 ft. (13.7 m) sections.
Order K937-45



TIG OPTIONS CONT.

Arc Start Switch
Comes with a 25 ft. (7.6 m) cable. Attaches to the TIG torch for convenient finger control.
Order K814



Contactor Kit
For use with TIG Module.
Order K938-1



Docking Kit
Secures TIG Module to top of flat-roofed power source.
Order K939-1



Precision TIG® 225 Ready-Pak®
For AC TIG welding with square wave performance, use the AC generator of the engine-driven welder to supply the power. Easy setup. Includes torch, foot Amptrol, gas regulator and hose. Requires the K1816-1 Full KVA Adapter Kit.
Order K2535-1



Invertec® V205-T AC/DC One-Pak® Package
For AC TIG welding with square wave performance, use the AC generator of the engine-driven welder to supply the power. Easy setup. Includes torch, parts kit, regulator and hose kit, Twist-Mate™ torch adapter, work cable with Twist-Mate end and foot Amptrol®. Requires the K1816-1 Full-KVA Adapter Kit.
Order K2350-2



Full - KVA Adapter Kit
Provides convenient connection of Lincoln Electric equipment having a 240V AC 1-phase plug (NEMA 6-50P) to the full-KVA receptacle on engine-driven welders.
Order K1816-1

WIRE FEEDER OPTIONS



LN™-25 PRO Wire Feeder
 Portable CC/CV unit for flux-cored and MIG welding with MAXTRAC® wire drive system. Includes gas solenoid and internal contactor.
Order K2639-1



Magnum® 350 Innershield® Gun (for LN™-25 PRO)
 For self-shielded wire with 15 ft. (4.5 m) cable. For .062-3/32" (1.6-2.4 mm) wire.
Order K126-2



Drive Roll and Guide Tube Kit (for LN™-25 PRO)
 For cored or solid steel wire.
Order KP1697-068 for .068-.072" (1.8 mm)
Order KP1697-5/64 for 5/64" (2.0 mm)



Magnum® 300 MIG Gun
 For .035-.045" (0.9-1.2 mm) gas-shielded wire with 15 ft. (4.5 m) cable.
LN™-25 PRO Order: K1802-1 (Includes Connector Kit)



Drive Roll and Guide Tube Kit (for LN™-25 PRO)
 For .035-.045" (0.9-1.1 mm) solid steel wire.
Order KP1696-1



WIRE FEEDER OPTIONS CONT.

Power MIG® 180C
 Premium compact wire welder with continuous voltage control for MIG and flux-cored welding. 30 to 180 amp output range. Get input power from the AC generator of the engine-driven welder with the K1816-1 Full-KVA Adapter Kit (required). Add the K2532-1 Magnum® 100SG Spool Gun for aluminum MIG welding.
Order K2473-1



Full - KVA Adapter Kit
 Provides convenient connection of Lincoln Electric equipment having a 240V AC 1-phase plug (NEMA 6-50P) to the full-KVA receptacle on engine-driven welders.
Order K1816-1



Magnum® 100SG Spool Gun
 Designed to easily feed 4" (102 mm) diameter 1 lb. (0.45 kg) spools of .030" (0.8 mm) or .035" (0.9 mm) diameter SuperGlaze® aluminum MIG wire. Includes gun, adapter kit, .035" (0.9 mm) contact tips (qty. 3), gas nozzle, and a 1 lb. (0.45 kg) spool of SuperGlaze® 4043 .035" (0.9 mm) MIG wire. Packaged in a convenient carrying case.
Order K2532-1

PLASMA CUTTING OPTIONS



Pro-Cut® 55
 Cuts metal using the AC generator power from the engine-driven welder. Maximum cut thickness is 1/2" (13 mm). Requires the K1816-1 Full-KVA adapter kit.
Order K1580-1



Full - KVA Adapter Kit
 Provides convenient connection of Lincoln Electric equipment having a 240V AC 1-phase plug (NEMA 6-50P) to the full-KVA receptacle on engine-driven welders.
Order K1816-1

RANGER® 10,000 PLUS AND RANGER® 10,000 ORDER FORM

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
RANGER 10,000 Plus (Kohler OHV Command CH23S Engine) (CSA)	K1419-5		
RANGER 10,000 Plus (Subaru Robin OHV EH65 Engine) (CSA)	K2468-2		
RANGER 10,000 (Honda OHV GX620K1 Engine) (CSA)	K2160-4		
RECOMMENDED GENERAL OPTIONS			
Power Plug Kit (20 amp)	K802N		
Power Plug Kit (15 amp)	K802R		
Full-KVA Power Plug	T12153-9		
GFCI Receptacle Kit (20 amp) 2 kits required	K1690-1		
Spark Arrester Kit	K894-1		
Canvas Cover	K886-1		
Undercarriages			
Hand Moving Undercarriage with Puncture-Resistant Tires	K889-2		
Hand Moving Undercarriage with Puncture-Proof Tires	K889-3		
All Terrain Undercarriage	K1737-1		
Factory Undercarriage	K1770-1		
-Welding Gas Cylinder/LPG Tank Holder (for K1770-1)	K1745-1		
-Roll Cage (attaches to K1737-1 and K1770-1 and K2635-1 trailer)	K1788-1		
Small Two Wheel Welder Trailer & Duo Hitch™ - Available March 2007	K2635-1		
-Fender and Light Kit	K2639-1		
-Cable Rack	K2640-1		
RECOMMENDED STICK OPTIONS			
Accessory Kit, 400 amp	K704		
Accessory Kit, 150 amp	K875		
RECOMMENDED TIG OPTIONS			
Pro-Torch® TIG Torch PTA-26V	K1783-9		
Magnum® Parts Kit	KP509		
TIG Module	K930-2		
- Control Cable (required)	K936-4		
- Control Cable Extension	K937-45		
- Arc Start Switch (required)	K814		
- Contactor Kit (required)	K938-1		
- Docking Kit	K939-1		
Precision TIG® 225 Ready-Pak® (for AC TIG Welding)	K2535-1		
Invertec® V205-T AC/DC One-Pak® Package (for AC TIG welding)	K2350-2		
- Full KVA Adapter Kit (required for K2535-1 and K2350-1)	K1816-1		
RECOMMENDED WIRE FEEDER OPTIONS			
LN™-25 PRO Wire Feeder	K2613-1		
Magnum® 350 Innershield® Gun	K126-2		
Drive Roll and Wire Guide Kit .068"-.072" (for LN™-25 PRO)	KP1697-068		
Drive Roll and Wire Guide Kit 5/64" (for LN™-25 PRO)	KP1697-5/64		
Magnum® 300 MIG Gun (for LN™-25 PRO) (includes Connector Kit)	K1802-1		
Drive Roll and Wire Guide Kit (for LN™-25 PRO)	KP1696-1		
Power MIG® 180C	K2473-1		
- Full-KVA Adapter Kit (required)	K1816-1		
- Magnum® 100SG Spool Gun	K2532-1		
RECOMMENDED PLASMA CUTTING OPTIONS			
Pro-Cut® 55	K1580-1		
- Full-KVA Adapter Kit (required)	K1816-1		
	TOTAL:		

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company® is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.



THE LINCOLN ELECTRIC COMPANY

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